hp photosmart 930 series digital camera



user's manual



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Chapter 1: Getting started

Congratulations on your purchase of this digital camera! Your new camera has many features to enhance your picture-taking experience, including HP Instant ShareTM, direct printing capability, manual and automatic controls, on-camera Help, and an optional camera dock.

With HP Instant Share, you can easily select pictures on your camera to e-mail or print automatically the next time you connect the camera to your computer. So, within minutes, your friends and family can be viewing your pictures without burdening them with large e-mail attachments. Or you can use the direct printing capability with any HP Photosmart printer or other select HP printer without ever connecting to your computer. What a great way to keep others close while you capture precious memories!

To further enhance your experience, you may purchase an HP Photosmart 8886 camera dock (see page 103). The camera dock allows you to easily download images to a computer, send images to a printer or television, and recharge the camera batteries.

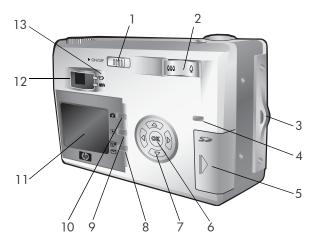
NOTE A dock insert is included in your camera box which enables your camera (and others of the same model) to use the HP camera dock. Please do not use the dock insert



without the camera dock and do not discard it. See the HP 8886 Camera Dock User's Manual for instructions on using the dock insert with the camera dock.

Camera parts

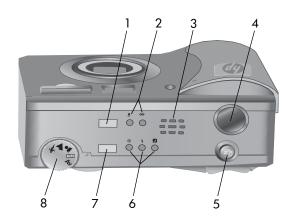
NOTE Refer to the pages in parentheses after the part names for more information about those parts.



#	Name	Description
1	ON/OFF switch (page 17)	Turns the camera power on and off
2	Zoom lever with HH Zoom Out and ↑ Zoom In controls (page 35)	Zooms out the lens to the wide angle position, and zooms in the lens to the telephoto position
3	Wrist strap mount (page 15)	Allows you to attach a wrist strap

#	Name	Description
4	Power/Memory	Solid—camera is on
	light (page 17)	Fast blinking—camera is writing to the memory card
		Slow blinking—camera is off and is charging the batteries
		Off—camera is off
5	Memory card door (page 16)	Allows you access to insert or remove the memory card
6	OK button (pages 36, 51)	Allows you to display the Capture and Playback menus and to select menu options on the Image Display
7	© Controller with and	Allows you to move through menus and images on the Image Display
	♦ buttons	
8	☑/☑ Share button (page 60)	Turns the Share menu on and off the Image Display
9	Playback button (page 49)	Turns Playback on and off the Image Display
10	Live View button (page 28)	Turns Live View on and off the Image Display
11	Image Display (page 28)	Allows you to frame pictures and video clips using Live View and review them afterward in Playback, and to view all the menus

#	Name	Description
12	Viewfinder (page 22)	Allows you to frame the subject of your picture or video clip
Viewfinder lights: □ Video and AF/\$ Auto Exposure/Auto Focus and Flash	Fi is solid red—video is recording AF/\$ is solid green—after you pressed the Shutter button halfway down, the camera is ready (auto exposure and auto focus are locked, and the flash is ready)	
		AF/\$\(\frac{1}{2}\) is blinking green—either a focus error occurred when you pressed the Shutter button halfway down, the flash is charging, or the camera is processing a picture (see the following NOTE)
		Both and AF/4 are blinking—an error has occurred, for example, the memory card is full or there is no memory card in the camera (see the following NOTE)
		NOTE If an error prevents a picture from being taken, then an error message will display on the Image Display. See Error messages on the camera on page 84.



#	Name	Description
1	Focus button (page 30)	Allows you to select the Macro focus range setting (to take close-up pictures), or the Infinity focus range setting (to take pictures of distant objects and landscapes)
2	Focus lights: Macro and Infinity focus (page 30)	Lights solid when you select the Macro ♥ or the Infinity ∞ focus range setting
3	Speaker	Plays camera sounds and audio clips
4	Shutter button (pages 22, 25)	Takes a picture and records audio
5	□ Video button (page 24)	Starts and stops recording a video clip

#	Name	Description
6	Flash lights: Flash Off, Flash On, and Night (page 33)	Lights solid when you select the Flash Off ③, Flash On ৡ, or Night flash setting
7	Flash button (page 33)	Allows you to select the Flash Off ③, Flash On 4, or Night ② flash setting
8	Exposure Mode dial with Action, Landscape, Portrait, Auto, and Av Aperture Priority settings (page 31)	Allows you to select the exposure mode



#	Name	Description
1	Microphone (page 23)	Records audio clips
2	Self-Timer light (page 25)	Blinks during the 10-second countdown before taking a picture when Self-Timer in the Capture menu is set to On or On - 2 shots. When set to On - 2 shots, blinks during the additional time between the first and second shots.
3	Flash (page 33)	Provides additional light to improve picture-taking
4	USB connector (pages 67, 68)	Allows you to connect a USB cable from the camera to a USB-enabled computer or printer

#	Name	Description
5	Power adapter connector (page 104)	Allows you to connect an optional HP AC power adapter to the camera to either operate the camera without batteries, or recharge the batteries in the camera
6	Tripod mount	Allows you to mount the camera to a tripod
7	Camera dock connector (page 103)	Allows you to connect the camera to the optional HP 8886 camera dock
8	Battery door (page 16)	Allows access to insert and remove the batteries

Setup

Attaching the wrist strap

Attach the wrist strap to the wrist strap mount on the side of the camera as shown.



Installing the batteries

- Open the battery door on the bottom of the camera.
- 2 Insert the batteries as indicated inside the door.
- 3 Close the battery door.



NOTE For more information about batteries, see Managing batteries on page 100. You can also use an optional HP AC power adapter to power the camera and recharge batteries in the camera. For more information about the HP AC power adapter, see Purchasing camera accessories on page 103.

Installing the memory card

- With the camera turned off and the back of the camera facing you, open the memory card door by sliding the door to the right.
- 2 Insert the memory card, making sure that it snaps into place.
- **3** Close the memory card door.

To remove the memory card, first make sure the camera is turned off. Open the memory card door, then push the memory card in and it will spring outward from the connector.



Turning on power

Turn the camera on by sliding the NON/OFF switch to the right and then releasing it.

The lens extends, the Image Display turns on, and the Power/Memory light turns on solid.



Understanding the status screen

When you turn on the camera, the HP logo screen and then the status screen display for a few seconds on the Image Display.

The main part of the status screen shows the current focus, flash, Resolution, and Compression settings, as well as the battery level and pictures remaining count. Any non-default Capture menu settings are also shown across the top of the status screen.



The status screen is also displayed for a few seconds any time you change the focus range, exposure mode, or flash settings on the camera. (See Setting the focus range on page 30, Setting the exposure mode on page 31, and Setting the flash on page 33.)

Restoring previous settings

Some of the settings that you can change in the camera menus do not remain set after you turn the camera off. However, you can restore the settings from the last time the camera was on and had at least one non-default setting (which could actually be several power cycles ago) by holding down the OK button while also sliding the NON/OFF switch to turn the camera on. The restored settings are then displayed across the top of the status screen. (See the previous section.)

Choosing the language

The first time you turn the camera on, the following screen appears and prompts you to choose a language.

- Scroll to the language that you want by using the buttons on the Controller .
- 2 Press the OK button to select the highlighted language.



Setting the date and time

The camera has a clock that records the date and time at which you take each picture. The first time you turn the camera on, the following screen appears after you choose the language.

- Adjust the value of the highlighted selection by using the buttons.
- 2 Press the buttons to move to the other selections.



Repeat steps 1 and 2 until the correct date, time, and date/ time format are set.

- **NOTE** In the date/time format, mm=month, dd=day, and yyyy=year.
- 3 Press the OK button when the proper values are entered. The Image Display then turns off.

Installing the software

The camera software allows you to unload images from the camera, view them, print them, and e-mail them. It also allows you to configure the **Share** menu on the camera.

See Chapter 4: Using hp instant share on page 59 for information about configuring the Share menu on the camera, and Chapter 5: Unloading and printing images on page 67 for information about connecting the camera to a computer or printer.

NOTE Copies of this User's Manual are located on the HP Photo & Imaging software CD. Look in the \docs\Readme file on the CD to see where the manual in your language is located.

Windows

- NOTE For the HP Instant Share component of the HP Photo & Imaging software to function properly on your Windows computer, you must have installed at least Internet Explorer 5.01 on Windows 2000 or XP, or Internet Explorer 5.01 Service Pack 2 on Windows 98, 98 SE, or Me.
- Insert the HP Photo & Imaging software CD into the CD drive of your computer. The installation window automatically appears.

- **NOTE** If the installation window does not appear, click **Start**, and then click **Run**. Type **X:\Setup.exe**, where **X** is the letter of your CD drive.
- 2 Click Next, and then follow the on-screen instructions to install the software.

Your Windows CD may also include bonus software from other manufacturers. To install any bonus software:

- Click Start, click Run, and in the Open box, type
 X:\Bonus\setup.exe (where X is the letter of your CD drive).
- 2 Click OK, and then follow the on-screen instructions to install the bonus software.

Macintosh

- Insert the HP Photo & Imaging software CD into the CD drive of your computer.
- 2 Double-click the CD icon on the computer desktop.
- 3 Double-click the installer icon, and then follow the on-screen instructions to install the software.

NOTE Before you can unload images from the camera to a Macintosh computer, you must first change the USB Configuration setting to Disk Drive in the Setup menu on the camera. See Chapter 6: Using the setup menu on page 70, and then see USB configuration on page 72.

Your Macintosh CD may also include bonus software from other manufacturers. To install any bonus software:

- 1 Double-click the Bonus folder icon.
- 2 Double-click the installer icon for the bonus software.
- 3 Follow the on-screen instructions to install the software.

Camera states and menus

Your camera has three main states that allow you to complete certain tasks. Each of these states has an associated menu you can use to adjust camera settings or perform tasks in that state.

- Capture—Allows you to take still pictures and record video clips. For information on using Capture, see Chapter 2: Taking pictures and recording video clips on page 22.
- Playback—Allows you to review the still images and video clips that you capture. For information on using Playback, see Chapter 3: Reviewing images and video clips on page 49.
- Share—Allows you to use the HP Instant Share technology
 to select images in the camera that will be automatically
 processed later when the camera is connected to your
 computer or to a compatible, USB-enabled HP printer. For
 information on using Share, see Chapter 4: Using hp instant
 share on page 59.

Your camera also has a fourth menu, the **Setup** menu, which allows you to adjust a number of camera settings. For information on using the **Setup** menu, see **Chapter 6: Using the setup menu** on page 70.

Chapter 2: Taking pictures and recording video clips

Taking still pictures

You can take a picture almost any time the camera is on, regardless of what is being shown on the Image Display. For example, if a menu is currently displayed when you press the **Shutter** button, the menu will be canceled, and the camera will take a picture.

To take a still picture:

- 1 Frame the subject for your picture in the viewfinder.
- 2 Hold the camera steady and press the Shutter button halfway down. The camera measures and then locks the focus and exposure.



3 Press the Shutter button all the way down to take the picture. You will hear a shutter click when the camera takes the picture.

After the picture is taken, the image is displayed for several seconds in Instant Review on the Image Display. You can delete the image during Instant Review by pressing the OK button.

You can use **Playbac**k to review the pictures you have taken. See **Using playback** on page 49. NOTE If you release the Shutter button only halfway after taking a picture, the focus and exposure measurements from the previous picture are retained. You can then press the Shutter button all the way down again and take another picture with the same focus and exposure as the previous picture. You can continue to do this to capture a sequence of pictures using the same focus and exposure. This is helpful when rapidly taking pictures and for capturing panoramas.

Recording audio with still pictures

You can record audio clips that are attached to the still pictures you take. An audio clip can be a maximum of 60 seconds long.

The following procedure explains how to record an audio clip while you are taking a still picture. You can also record an audio clip later to attach to a still image by using the **Record Audio** menu option in the **Playback** menu. See **Using the playback menu** on page 51, and then see **Record audio** on page 54.

- 1 Press the Shutter button all the way down to take the picture.
- 2 Continue to hold the Shutter button down to start recording the audio clip. Instant Review remains on the Image Display, and a microphone ⊕ icon and audio counter appear on the Image Display as well.
- 3 Release the Shutter button to stop recording audio.

NOTE You must hold the **Shutter** button down for longer than 2 seconds after the picture is taken to have the recorded audio saved. Otherwise, it is discarded.

Audio recording stops when you release the Shutter button, the maximum audio clip length of 60 seconds is reached, or the memory card is full, whichever comes first. After recording has stopped, the image is displayed for several seconds in Instant Review on the Image Display. You can delete the image and the audio clip that is attached to the image during Instant Review by pressing the OK button.

You can use **Playback** to review the audio clips you have recorded. See **Using playback** on page 49.

NOTE If you are unhappy with an audio clip you record, you can delete just the audio clip (not the still image to which it is attached) by using the Audio Only option in the Delete sub-menu of the Playback menu. See Delete on page 55.

Recording video clips

NOTE Zoom does not work while recording video clips.

A video clip includes audio and can be up to 2 minutes long.

- Frame the subject for your video in the viewfinder.
- 2 Press and release the Video

 □ button to start recording
 video. The Video □
 viewfinder light turns on
 solid red. If Live View is on
 when the camera starts



- recording, **REC** and a video counter appear on the Image Display. See **Using live view** on page 28.
- 3 Press and release the Video button again to stop recording video.

NOTE If you have set Self-Timer to On or On - 2 shots in the Capture menu (see page 38), the camera will start recording 10 seconds after you press the Video button. However, with the On - 2 shots setting, the camera only records one video clip.

The camera automatically stops recording when the maximum video clip length of approximately 2 minutes is reached, or the memory card is full, whichever comes first. After recording has stopped, the first frame of the video clip and **Processing...** appear on the Image Display. While it is processing, you can delete the video clip by pressing the OK button.

You can use **Playback** to review the video clips you have taken. See **Using playback** on page 49.

Taking self-timer pictures

You can also take still pictures using the Self-Timer settings in the Capture menu.

- 1 Set Self-Timer to either On or On 2 shots in the Capture menu. See Using the capture menu on page 36, and then see Self-timer on page 38.
- 2 Secure the camera to a tripod or set it on a stable surface.
- 3 Frame the subject for your picture in the viewfinder.
- 4 Press the Shutter button halfway down. The camera measures and then locks the focus and exposure. The camera will hold these settings for the 10 seconds until it takes the picture.
- NOTE If you immediately press the Shutter button all the way down instead, the camera locks focus and exposure just before the end of the 10-second countdown. This is useful when one or more subjects will be entering the picture during the 10-second countdown period.

5 Press the Shutter button all the way down. A 10-second countdown appears on the Image Display. The Self-Timer light on the front of the camera blinks slowly for 7 seconds and then quickly for the final 3 seconds before the camera takes the picture. If you set Self-Timer to On - 2 shots, the Self-Timer light blinks for a few more seconds until the second picture is taken.

Using the focus brackets

The two brackets in the middle of the viewfinder or the Live View screen (see Using live view on page 28) show the focus region for the picture you are taking. When you press the Shutter button halfway down, the camera uses this focus region to measure and then lock the focus.

The focus brackets turn green in the **Live View** screen and the AF/\$\pm\$ viewfinder light turns on solid green when the image is in focus and the camera can lock the focus. However, the focus brackets turn red and the AF/\$\pm\$ viewfinder light blinks green when the camera is unable to focus.

If the focus brackets turn red and the viewfinder light blinks, release the Shutter button, re-frame the subject for your picture, and then press the Shutter button halfway down again. If the focus brackets continue to turn red and the viewfinder light continues to blink after several tries, the lighting may be too low, or there may not be enough contrast in the focus region. Try using Focus Lock. See Using focus lock on page 27.

If the focus brackets turn red, the viewfinder light blinks, and the Macro witicon blinks on the Image Display, either the camera is set to the Macro witifocus range but detects the focus is farther away than the macro (close-up) range, or the camera is set to the Normal focus range but detects the focus is closer than the normal range. For more information, see Setting the focus range on page 30.

NOTE When set to the Macro ♥ focus range, the camera will not take a picture if it cannot find focus. However, when set to the Normal focus range (the default), the camera will still take a picture if it cannot find focus.

Using focus lock

Focus Lock allows you to focus on a subject that is not in the center of the picture, or to capture action shots more quickly by pre-focusing in the area where action will occur. You can also use Focus Lock to help achieve focus in low lighting or low contrast situations.

- 1 Frame the subject for your picture within the focus brackets in the viewfinder or in Live View. (See Using live view on page 28.)
- 2 Press the Shutter button halfway down to lock the focus and exposure.
- 3 Continue to hold the Shutter button halfway down while you re-frame or adjust your subject for proper positioning.
- 4 Press the Shutter button all the way down to take the picture.

Using live view

The Image Display allows you to frame pictures and video clips using Live View. To activate Live View on the Image Display, press the Live View Dutton.

NOTE Using the Image Display consumes a lot of battery power. To conserve batteries, use the viewfinder instead.

The following table describes the information that is displayed in the Live View screen of the Image Display when the camera settings are at their default values.

NOTE If you change other camera settings, icons for those settings will also be displayed in the Live View screen.



#	Icon	Description
1	A4	Auto flash setting
2	or	Battery level (actual icon shown depends on the state of your camera batteries; see Managing batteries on page 100)
		——————————————————————————————————————

#	Icon	Description
3	12	Pictures remaining on the memory card (depends on how much space is remaining on the memory card)
4	**	Compression setting (default is Better, which is indicated by the two stars)
5	5MP	Resolution setting (default is 5MP)
6		Focus brackets (see Using the focus brackets on page 26)

NOTE The F-number and shutter speed also appear in the Live View screen whenever you press the Shutter button halfway down.

NOTE If the light is too low when taking a still picture using Live View, a shaking hand icon will display on the Image Display. This cautions you that the picture you will take is likely to be blurry due to the long exposure that will be required. Therefore, you may want to use the flash (see Setting the flash on page 33) or a tripod.

Setting the focus range

The Focus button lets you toggle between the three focus range settings on the camera. Normal is the default setting. The focus range setting resets to Normal when you turn the camera off.



lcon	Setting	Description
None	Normal	Use when taking pictures of subjects greater than 0.5 m (19.7 in) away. Auto focus is limited to a distance range of 0.5 m (19.7 in) to infinity.
*	Macro	Use when taking close-up pictures of subjects less than 0.5 m (19.7 in) away. Auto focus is limited to a distance range of 0.14 to 0.7 m (5.5 to 27.6 in) at wide, and 0.4 to 0.7 m (15.7 - 27.6 in) at zoom ranges greater than wide.
∞	Infinity	Use when taking pictures of distant objects and landscapes. Focus is fixed at infinity.

NOTE When set to the Macro ♥ focus range, the camera will not take a picture if it cannot find focus (the focus brackets turn red in Live View and the AF/\$ viewfinder light blinks green). However, when set to the Normal focus range, the camera will still take a picture if it cannot find focus.

Setting the exposure mode

NOTE The exposure mode setting does not apply when you are recording video clips.

The Exposure Mode dial lets you select between five exposure modes for the still pictures you take. The exposure mode setting determines how the camera selects the ISO speed, F-number (aperture), and shutter speed for the given scene brightness.



Simply turn the Exposure Mode dial to the setting you want. The following table describes each of the exposure mode settings on the camera.

lcon	Setting	Description
AUTO	Auto	The camera automatically selects an aperture and shutter speed.
K	Action	The camera biases toward faster shutter speeds and higher ISO speeds to stop action.
	Landscape	The camera biases toward smaller apertures and lower ISO speeds for better depth of focus and quality.
*	Portrait	The camera biases toward wider apertures to blur the background and uses lower contrast for professional-looking portraits.
Av	Aperture Priority	You select one of two specific apertures (F-numbers) in Live View by using the buttons. Then the camera selects the appropriate shutter speed.

NOTE When you set the exposure mode to Action [™], Landscape ♠, or Portrait ♣, the ISO Speed menu option is grayed-out in the Capture menu, and the camera automatically selects the best ISO Speed setting.

NOTE If you set the exposure mode to Action and release and then re-press the Shutter button all the way down within 2 seconds after taking a picture, the camera takes the next picture using the same focus and exposure measurements as the previous picture. This allows you to take multiple pictures in rapid succession without having to wait for the camera to measure focus and exposure for each picture.

Using exposure compensation

In difficult lighting conditions, you can use Exposure Compensation to override the automatic exposure setting that the camera makes. Exposure Compensation settings range from -3.0 EV (Exposure Value) to reduce the exposure of the image (darkening it), to +3.0 EV to increase the exposure of the image (brightening it).

By default, Exposure Compensation is set to 0 (zero) and no indication is given on the Image Display. When Live View is turned on and you press the buttons, a meter appears in the middle of the Image Display, and the Exposure Compensation value is shown on the bottom of the display.



When you have not changed Exposure Compensation for 2 seconds, the meter disappears, but the value remains at the bottom of the screen flanked by arrows (unless it has been set to 0).



Exposure Compensation resets to the default 0 (zero) setting when you turn the camera off.

Setting the flash

NOTE The flash does not work while recording video clips.

The Flash button lets you toggle between the four flash settings on the camera. Auto A4 is the default flash setting. The flash setting resets to Auto when you turn the camera off.



To change the flash setting, press the Flash button on the top of the camera until the Flash Off ③, Flash On ¾, or Night ② flash light is lit. The default Auto ¼ flash setting is selected when none of the three flash lights is lit. The following table describes the different flash settings.

lcon	Setting	Description
A4	Auto	The camera measures the available light and fires the flash if necessary.
3	Flash Off	The camera will not fire the flash.
4	Flash On	The camera always fires the flash. If the light is behind your subject, you can use this setting to increase the light on the front of your subject. (This is called "fill-flash.")
2	Night	The camera fires the flash to illuminate objects in the foreground. It then continues to expose as if the flash had not fired to gather the background. This setting only works when taking pictures of still objects. You may also want to use a tripod for better results.

NOTE With each of the flash settings, you can also set Redeye Reduction to On in the Capture menu. When Redeye Reduction is On, you will see the Redeye Reduction ⊚ icon displayed with the icon for the flash setting in the status screen and in Live View. To turn Redeye Reduction On, see Redeye reduction on page 43.

NOTE Only the Flash Off (3) and Flash On 4 settings are available when you set the Exposure Mode dial to Aperture Priority Av. See Setting the exposure mode on page 31.

Using zoom

NOTE Zoom does not work while recording video clips.

Optical zoom

Press the Zoom Out ★★ and Zoom In ♠ controls on the Zoom lever to move the lens between wide angle and telephoto positions (1x to 3x). If Live View is on, a zoom indicator displays at the bottom of the Image Display to show you the current zoom setting.



NOTE The zoom indicator in the Live View screen contains a divider to show when you cross-over from optical to digital zoom.

Digital zoom

NOTE For better results when using digital zoom, you may want to use a tripod to minimize camera shake.

- 1 Press the Live View Dutton to turn on Live View.
- 2 Press the Zoom In ♠ control to optically zoom in to the maximum level, then release the control.
- 3 Press the Zoom In \$\int \control again and hold it until you reach the desired size in the Image Display. A yellow cropping frame surrounds the area of the image that will be captured.



The **Resolution** number on the right side of the screen also becomes smaller as you digitally zoom. For example, 2.9 appears in place of 5 MP, indicating that the image is being cropped down to a size of 2.9 Megapixels.

4 When the cropping frame is at the right size, press the **Shutter** button to take the picture.

To turn digital zoom off and return to optical zoom, press the **Zoom Out 444** control until digital zooming stops. Release the control, and then press the control again.

Using the capture menu

The Capture menu allows you to adjust various camera settings that affect the qualities of the images and video clips you capture with your camera, such as their exposure, color, and resolution.

1 To display the Capture menu, press the OK button at any time when the Image Display is turned off, or when Live View is turned on in the Image Display.

Screen one



Screen two



2 Use the buttons to scroll through the Capture menu options.

- 3 Either press the OK button to select a highlighted option and display its sub-menu, or use the ◀ ▶ buttons to change the setting for the highlighted option without going to its sub-menu.
- 4 Within a sub-menu, use the ____ buttons and then the OK button to change the setting for the Capture menu option.
- **NOTE** When you highlight a menu option within a sub-menu, a short Help description for that menu option is displayed at the bottom of the screen.
- 5 To exit the Capture menu, highlight the EXIT CAPTURE MENU option and press the OK button.

Help for the menu options

Help... is the last option in each of the Capture sub-menus. The Help... option provides information about that Capture menu option and its settings. For example, if you press OK when Help... is highlighted in the AE Metering sub-menu, the AE



Metering Help screen is displayed, as shown.

Use the buttons to scroll through the Help screens. To exit the Help and return to the particular Capture sub-menu, press the OK button.

Self-timer

If you press OK when the Self-Timer option is highlighted in the Capture menu, the Self-Timer sub-menu displays. This sub-menu allows you to turn the self-timer on and off. When you set Self-Timer to either On or On - 2 shots, the camera will take



a picture 10 seconds after you press the Shutter button all the way down. If you set Self-Timer to On - 2 shots, the camera will also take a second picture 3 seconds after the first picture is taken.

Self-Timer is good for situations where you need to minimize camera shake. For example, keeping the camera steady on a tripod for a long exposure is easier if you use Self-Timer.

You can also use **Self-Timer** when recording video clips. The camera will start recording video 10 seconds after you press the **Video** button. However, with the **On - 2 shots** setting, the camera only records one video clip.

The default Self-Timer setting is Off. The Self-Timer setting resets to Off after each picture is captured or video clip is recorded, and when you turn the camera off. For information on using Self-Timer, see Taking self-timer pictures on page 25, or Recording video clips on page 24.

White balance

If you press OK when the White Balance option is highlighted in the Capture menu, the White Balance sub-menu displays. In some cases, it may be necessary to pre-set the light source so the camera can reproduce colors more accurately and ensure that whites appear white in the



captured image. The setting in this sub-menu determines how the camera will adjust the colors in the image to match the scene illuminant.

The default White Balance setting is Auto. The White Balance setting resets to Auto when you turn the camera off. Set the White Balance according to the situations explained in the following table.

lcon	Setting	Description
None	Auto	The camera automatically identifies and corrects for the scene illuminant.
**	Sun	The camera balances color assuming it is outdoors under sunny or bright cloudy conditions.
-	Shade	The camera balances color assuming it is outdoors in shade, in dark cloudy conditions, or at dusk.
•	Tungsten	The camera balances color assuming incandescent or halogen lighting (typically found in homes).

lcon	Setting	Description
11	Fluorescent	The camera balances color assuming fluorescent lighting.
U	Manual	The camera calculates a custom White Balance based on your target image (see the following subsection).

If you press OK when the Manual option is highlighted in the White Balance sub-menu, the Manual White Balance screen displays. The Live View portion of the screen shows the color tint from the previous Manual White Balance setting that was made.



NOTE To restore the previous Manual White Balance setting, simply press the OK button in the Manual White Balance screen without pressing the Shutter button.

To change the Manual White Balance setting:

- Point the camera at a white or gray target (such as a piece of paper), making sure that the region inside the focus brackets encompasses the white or gray target.
- 2 Press the Shutter button (the camera will not take a picture). The camera then calculates a custom White Balance setting based on the region inside the focus brackets. During the calculation, PROCESSING... is displayed on the screen. When the calculation is complete, the color tint in Live View changes to match the new Manual White Balance setting, and WHITE BALANCE SET is displayed.

- 3 If needed, repeat steps 1 and 2 until you get the desired Manual White Balance setting.
- 4 When you are satisfied with the Manual setting you have made, press the OK button to exit the Manual White Balance screen and return to the Capture menu.

AE metering

If you press OK when the AE
Metering option is highlighted in the
Capture menu, the AE Metering
sub-menu displays. This sub-menu
allows you to specify which region of
the scene the camera will use to
measure and calculate the exposure.



The following table describes the AE

Metering settings. The default setting is Center-Weighted. The

AE Metering setting resets to Center-Weighted when you turn
the camera off.

lcon	Setting	Description
	Average	The camera uses the entire scene region to measure and calculate exposure.
None	Center-Weighted	The camera uses the center half of the scene region to measure and calculate exposure.
•	Spot	The camera uses a small area in the center of the scene region to measure and calculate exposure.

ISO speed

NOTE The ISO Speed setting does not apply to recording video clips.

If you press OK when the ISO Speed option is highlighted in the Capture menu, the ISO Speed sub-menu displays. This sub-menu allows you to adjust the sensitivity of the camera to light.



Because lower ISO numbers allow slower shutter speeds, use the ISO 100 setting to capture higher quality images that have the least grain or "noise." In contrast, because higher ISO numbers allow higher shutter speeds, use a higher ISO Speed setting when taking either pictures in dark areas without a flash, or pictures of fast moving objects. However, higher ISO speeds produce pictures with more grain or "noise" and, thus, can be of lower quality.

NOTE If you are taking a picture in low light conditions without a flash and have set the camera to ISO 100, you may want to use a tripod because of the resulting slow shutter speed.

The default ISO Speed setting is Auto, which allows the camera to pick the best ISO Speed for the scene. The ISO Speed setting resets to Auto when you turn the camera off.

NOTE When you set the exposure mode to Action [™], Landscape ▲, or Portrait ♣, the ISO Speed menu option is grayed-out, and the camera automatically selects the best ISO Speed setting.

Color

If you press OK when the Color option is highlighted in the Capture menu, the Color sub-menu displays. This sub-menu allows you to set the color in which your images will be captured.



NOTE When you set Color to Sepia, your images will be captured in brown colors to make them look aged or old-fashioned.

NOTE Once you have taken a picture using either the Black & White or Sepia setting, the image cannot be adjusted back to Full Color later.

The default Color setting is Full Color. The Color setting resets to Full Color when you turn the camera off.

Red-eye reduction

If you press OK when the Red-eye option is highlighted in the Capture menu, the Red-eye Reduction sub-menu displays. This sub-menu allows you to turn red-eye reduction on and off. When set to On, the Red-eye Reduction setting works in conjunction with the current flash setting.



The red-eye phenomenon is caused by light from the flash reflecting off the subjects' eyes, which sometimes makes a human's or animal's eyes appear red in the captured image. When you set **Red-eye Reduction** to **On**, the camera flashes twice, minimizing the red-eye in the captured images of humans or animals.

The default **Red-eye Reduction** setting is **Off**, causing the flash to fire without red-eye reduction. The **Red-eye Reduction** setting remains set when you turn the camera off.

NOTE It will take longer to take a picture with Red-eye Reduction set to On. The shutter is delayed because of the additional flash. In turn, make sure your subjects wait for the second flash.

Resolution

If you press OK when the Resolution option is highlighted in the Capture menu, the Resolution sub-menu displays. This sub-menu allows you to set the resolution (number of pixels) at which your images will be captured.



The default Resolution setting is $5MP - 2608 \times 1952$. The Resolution setting remains set when you turn the camera off.

NOTE The Resolution number becomes smaller when you are using digital zoom. For example, 2.9 appears in place of 5 MP on the right side of the Image Display, indicating that the image is being cropped down to a size of 2.9 Megapixels.

At the default $5MP - 2608 \times 1952$ pixels (5 Megapixels) setting, the captured image will be full size. At the $1MP - 1296 \times 976$ pixels (1 Megapixel) setting, the image will be 1/4 size.

NOTE The Pictures Remaining count at the bottom of the screen updates when you select a new setting.

NOTE The Resolution setting affects the number of images that can be saved on your memory card. Fewer images will be saved on the memory card at the default, higher Resolution setting of 5MP - 2608 x 1952 than at the lower setting of 1MP - 1296 x 976. See Memory card capacity on page 110.

Compression

If you press OK when the Compression option is highlighted in the Capture menu, the Compression sub-menu displays. This sub-menu allows you to set how much JPEG compression your images will have.



The following table describes the Compression settings. The default setting is **Better**. The Compression setting remains set when you turn the camera off.

lcon	Setting	Description
***	Best	This setting produces the highest-quality images, but uses the most memory. This is recommended if you plan to enlarge images, or print images to a size larger than 18 by 24 cm (or 8 by 10 in).
**	Better	This setting produces high-quality images and requires less memory than the Best setting. This is recommended for printing images up to 18 by 24 cm (or 8 by 10 in).
*	Good	This is the most memory-efficient setting, ideal for images that you want to e-mail or post to the Internet.

NOTE The Pictures Remaining count at the bottom of the screen updates when you select a new setting.

NOTE The Compression setting affects the number of images that can be saved on your memory card. Fewer images will be saved on the memory card at the Best setting than at the default Better setting. Similarly, fewer images will be saved at the default Better setting than at the Good setting. See Memory card capacity on page 110.

Saturation

If you press OK when the Saturation option is highlighted in the Capture menu, the Saturation sub-menu displays. This sub-menu allows you to set how saturated the colors will be in your captured images.



The following table describes the Saturation settings. The default setting is Medium. The Saturation setting remains set when you turn the camera off.

lcon	Setting	Description
0	Low	The colors in your images will be more muted.
None	Medium	The colors in your images will be normally saturated.
+	High	The colors in your images will be more vivid.

Sharpness

NOTE The Sharpness setting does not apply to recording video clips.

If you press OK when the Sharpness option is highlighted in the Capture menu, the Sharpness sub-menu displays. This sub-menu allows you to set how sharp the edges will be in your pictures.



The following table describes the Sharpness settings. The default setting is Medium. The Sharpness setting remains set when you turn the camera off.

lcon	Setting	Description
\rightarrow	Low	The edges in your images will be softer.
None	Medium	The edges in your images will have normal sharpness.
÷	High	The edges in your images will be more pronounced.

Contrast

If you press OK when the Contrast option is highlighted in the Capture menu, the Contrast sub-menu displays. This sub-menu allows you to set how much contrast there will be between the dark and light colors in your captured images, including the amount of detail there will be in the highlights and shadows within the images.



The following table describes the Contrast settings. The default setting is Medium. The Contrast setting remains set when you turn the camera off.

lcon	Setting	Description
	Low	Your images will have less contrast: dark and light colors in the image will be less distinct, and there will be more details in the highlights and shadows.
None	Medium	Your images will have normal contrast.
•	High	Your images will have more contrast: dark and light colors in the image will be more distinct, and there will be less details in the highlights and shadows.

Setup

If you press OK when the Setup option is highlighted in the Capture menu, the Setup menu displays. See Chapter 6: Using the setup menu on page 70.

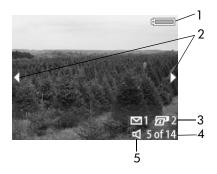
Chapter 3: Reviewing images and video clips

Using playback

After you have taken pictures or recorded video clips, you can use **Playback** to review them.

- 1 Press the Playback button to activate Playback. The most recently taken or reviewed image or video clip appears on the Image Display.
- 2 Use the \(\bar\) buttons to scroll through your images and video clips. Press and hold the \(\bar\) or \(\bar\) button to scroll faster.
- NOTE You only see the first frame of each video clip, which is indicated by the Video ☐ icon. You can use the Play option in the Playback menu to play video or audio clips. See Using the playback menu on page 51.
- 3 To turn the Image Display off after reviewing your images and video clips, press the Playback button again.

In addition to seeing the images or the first frames of video clips on the Image Display, some information about each image or video clip is also displayed in **Playback**. The following table describes the information that you may see displayed for each image or video clip while in **Playback**.



#	Icon	Description
1	or	—Battery level (actual icon shown depends on the state of your camera batteries; see Managing batteries on page 100)
		——————————————————————————————————————
2	4 >	Displays for the first few seconds when you enter Playback to indicate that you can scroll through all the images or video clips
3	☑ 1 ② 2	Indicates this image has been marked for HP Instant Share, including e-mailing one copy and printing two copies in this example (see Chapter 4: Using hp instant share on page 59), or blank if it is a video clip

#	Icon	Description
4	5 of 14	Shows the number of this image or video clip out of the total number of images and video clips on the memory card
5	Д	☐—Indicates this image has an audio clip
	or	T과—Indicates this is a video clip
	다	

Using the playback menu

The Playback menu allows you to play or record audio clips, play video clips, delete images, audio clips, or video clips or format the memory card, magnify an image on the Image Display, rotate an image, or view all of the settings that were used when capturing an image. From the Playback menu, you can also access the Setup menu to set a number of preferences on the camera.

- 1 To display the Playback menu, press the OK button while you are in Playback. If you are not currently in Playback, press the Playback button first, then press the OK button.
- 2 Use the \(\bar) \) buttons to move to the image or video clip you want to use.
- 3 Use the buttons to highlight the menu options on the left of the Image Display. Select a highlighted option by pressing the OK button.

NOTE While a Playback menu option is highlighted, you can use the ◀ ▶ buttons to scroll to other images and video clips. This is useful for performing the same action on several images or video clips, such as deleting multiple images or video clips.

The following table summarizes each of the Playback menu options and describes the information in the bottom right corner of each image while the Playback menu is displayed.



#	Icon	Description
1	₽	Exits the Playback menu
2	or or or □	□ — Plays an audio clip that is attached to this image
		□ Plays this video clip
3	/=	Provides options to either delete this image or video clip, delete only the audio clip attached to this still image, delete all images and video clips, or format the memory card
4	Og.	Magnifies this image by 4.5x (not available for video clips)

#	Icon	Description
5	凸	Rotates this image automatically 90 degrees clockwise (not available for video clips)
6	0	Allows you to view all of the settings that were used when capturing this image
7	8	Displays the Setup menu, which allows you to set a number of preferences on the camera
8	5 MP ★★	Shows the Resolution (such as 5MP) and Compression (such as the 2 stars for Better) for this image, or blank if it is a video clip
9	0:25 戊 or 0:25 ₪	☐ —Visible if this image has an audio clip attached to it, with the length of the audio clip displayed to the left of the icon
		□ —Visible if this is a video clip, with the length of the video clip displayed to the left of the icon
10	5 of 14	Shows the number of this image or video clip out of the total number of images and video clips on the memory card
11	date	Shows the date that this image was captured or this video clip was recorded
12	☑ 1 ② 2	Indicates this image has been marked for HP Instant Share, including e-mailing one copy and printing two copies in this example (see Chapter 4: Using hp instant share on page 59), or blank if it is a video clip

Play/Record audio

This **Playback** menu option is either **Play** or **Record Audio** depending on the still image or video clip that is currently displayed, as explained in the following subsections.

Play

If you press OK when the Play option is highlighted in the Playback menu, the camera will play either an audio clip that is attached to the currently displayed image, or the current video clip.



NOTE If there is no audio clip attached to the current image, the menu option is Record Audio instead, as explained in the next subsection.

You can adjust the audio volume by pressing the _______ buttons while the audio clip or video clip is playing. To stop the clip while it is playing, press the OK button.

Record audio

If you press OK when the Record Audio option is highlighted in the Playback menu, you can record an audio clip that will be attached to the currently displayed image. Audio recording starts immediately after you select this menu option. A microphone $\mathfrak D$ icon and audio counter are displayed during recording.



Audio recording stops when you press the OK button, the maximum audio clip length of 60 seconds is reached, or the memory card is full, whichever comes first.

NOTE If you are unhappy with an audio clip you record, you can delete the audio clip by using the Audio Only option in the Delete sub-menu, as explained in the next section. You can then use the Record Audio menu option again to re-record an audio clip, if you wish.

Delete

If you press OK when the Delete option is highlighted in the Playback menu, the Delete sub-menu displays, which lists several options:

- Cancel—Returns you to the Playback menu
- This Image—Deletes the currently displayed image or video clip
- Audio Only—Deletes only the audio clip attached to the currently displayed image and keeps the current image
- All Images—Deletes all of the images and video clips on the memory card
- Format Card—Deletes all of the images, video clips, and files on the memory card, and then formats the memory card



Use the __ _ buttons to highlight an option, and then press the OK button to select it.

Magnify

If you press OK when the Magnify option is highlighted in the Playback menu, the currently displayed image is automatically magnified. This option is only for viewing a magnified image on the Image Display; it does not permanently alter the image.



NOTE You cannot select this option if a video clip is currently displayed.

Selecting this option magnifies the image 4.5x. The center portion of the magnified image is displayed along with four arrows, which indicate that you can pan around the magnified image by pressing the and



buttons.

Press the OK button to exit the magnified image and return to the Playback menu.

Rotate

If you press OK when the Rotate option is highlighted in the Playback menu, the currently displayed image is automatically rotated 90 degrees clockwise. The camera then returns to the Playback menu overlaying the rotated image.

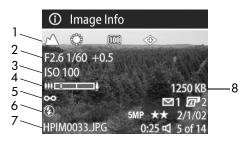


NOTE If you select this option for an image that has already been rotated, the image will be rotated again.

Image info

If you press OK when the Image Info option is highlighted in the Playback menu, the Image Info screen displays, which shows all of the settings that were used when capturing the currently displayed image. The following table explains the information that is displayed for each image when you select the Image Info option.

NOTE The information in the last three rows in the bottom, right-hand corner of the image is the same information that is provided in the **Playback** menu view of the image.



#	Description
1	Non-default exposure mode setting (Action, Landscape, Portrait, or Aperture Priority) and all non-default Capture menu settings
2	F-number (aperture) or blank if it is a video clip, shutter speed or blank if it is a video clip, and Exposure Compensation (EV) setting
3	ISO Speed setting that was used (100, 200, or 400), or blank if it is a video clip
4	Zoom position of lens when the picture was taken

#	Description	
5	Non-default focus range setting (Macro or Infinity)	
6	Flash setting that was used (Flash Off, Flash On, Flash On with Red-eye Reduction, Night, or Night with Redeye Reduction), or blank if it is a video clip	
7	File name of the image on the memory card	
8	File size of the image on the memory card	

Use the \P buttons to scroll to other images and view their information. Then press the OK button to return to the **Playback** menu.

Setup

If you press OK when the Setup option is highlighted in the Playback menu, the Setup menu displays. See Chapter 6: Using the setup menu on page 70.



Chapter 4: Using hp instant share

This camera has an exciting feature called HP Instant Share. This feature lets you select images in the camera to be automatically processed later when the camera is connected to your computer or to certain HP printers.

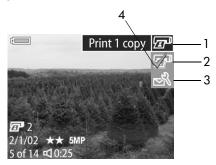
For example, you can select images that you want to have printed, then connect the camera to the computer or printer, and the selected images will be printed automatically.

As another example, you can select images in the camera to be automatically processed by HP's e-mail service. When the camera connects to your computer, the selected images are e-mailed to family, friends, or any e-mail address or group e-mail distribution list that you specify. The details about this are explained later in this chapter.

When you press the **Share** ☑/☑ button on the camera, the most recently taken or viewed image appears on the Image Display, along with any print or other destinations that have been selected for the image. You can use the ◀ ▶ buttons to scroll through the images to see destinations for the other images in the camera.

Using the share menu

When you press the **Share** ๗/☑ button, the **Share** menu displays in the upper right-hand corner of the Image Display. The following table describes each of the **Share** menu options.



#	lcon	Description
1	1	Print 1 copy of the currently displayed image when connected to a computer or printer. By default, the picture is printed 10 by 15 cm (4 by 6 in).
2		Print 2 copies of the currently displayed image when connected to a computer or printer.
3	Z [®]	Customize this menu lets you add e-mail addresses and other e-services to the Share menu. This procedure is explained later in this chapter.
4	~	Check mark indicates the destination has been selected for the currently displayed image. (You can select more than one destination per image.)

Using hp instant share to print pictures

- 1 Turn on the camera, and then press the Share ☑/☑ button.
- 2 Use the **♦** buttons to scroll to the image you want to print.

NOTE Video clips cannot be selected for printing.

- 3 Use the buttons to scroll to the print option you want in the Share menu.
- 4 Press the OK button to select the print option, and a ✓ appears over that print option. To un-select a print option, simply press the OK button again.
- **NOTE** You can select the **Print 1 copy** and the **Print 2 copies** print options for an image so that 3 copies of the image will be printed when connected to a computer or printer.
- 5 Scroll to other images by using the buttons, and repeat steps 3 and 4 to select print options for each image.
- 6 When you are finished selecting all the images you want to have printed, press the Share @/ ☐ button to exit the Share menu.
- 7 The next time you connect the camera to your computer or a compatible printer, the images you selected will be printed. See Chapter 5: Unloading and printing images on page 67 for information about connecting the camera to a computer or printer.

NOTE The Share menu creates a standard Digital Print Order Format (DPOF) file for print options.

Using the hp instant share e-mail service

Using HP Instant Share to e-mail images involves three steps:

- 1 Adding e-mail addresses or group distribution lists to the camera's Share menu (using your computer and the camera together).
- 2 Selecting images to be e-mailed (using the Share menu on the camera).
- 3 Connecting the camera to your computer to e-mail the images you selected.
- **NOTE** If you are using a Macintosh computer, you must have an active Internet e-mail account that is accessible when e-mailing the images you selected.

Adding e-mail addresses and group distribution lists

- **NOTE** You will need an Internet connection to complete this procedure on a Windows computer.
- 1 Turn on the camera, and then press the **Share** ₱/☑ button.
- 2 Highlight the Customize this menu...

 So option and press the OK button. A message on the Image Display appears asking you to connect the camera to your computer.
- NOTE If your computer is running Windows XP, when you connect the camera to your computer in the next step, a dialog box will display that requests you to Select the program to launch for this action. Simply click on Cancel to close this dialog box.

- 3 Connect the camera to your computer by using the USB cable or an optional HP 8886 camera dock. This activates the Camera Share Menu Setup Wizard.
- NOTE You need to have a memory card installed in your camera that is not locked and has some free space on it in order for the computer to recognize the camera from the Camera Share Menu Setup Wizard.
- 4 In the first window, click on either Retrieve from Camera on a Windows computer or Next on a Macintosh computer.
- 5 In the screen called Modify Share Menu:
 - On Windows, check to see that HP Instant Share
 E-mail is visible above the Add... button, then click on the Add... button.
 - On Macintosh, click on the Add... button.

6 If you are using a:

- Windows computer, you will be asked to sign in to HP's
 Passport program. HP Passport allows you to use HP's
 free e-mail service and other services that may be
 available in the future. The first time you see this screen,
 you will need to register as a new user. Follow the
 instructions on the screen to register.
- Macintosh computer, add the e-mail addresses you want.
 Then skip to step 8.

- 7 Once you have successfully registered, sign in to the HP Passport program, and then the HP Instant Share E-mail Setup screen will appear. Here you can either enter individual e-mail addresses or create group distribution lists, and specify how you want them to appear in the camera's Share menu. You can also enter a subject and message to go with all e-mails that will be sent to each e-mail address or distribution list. After completing the form, click Next. In the confirmation screen that appears, click Finish.
- 8 The names you specified for your newly added e-mail destinations or group distribution lists should now appear in the Modify Share Menu screen (in the Current Share Menu section). To add additional e-mail addresses or distribution lists to the camera Share menu, repeat steps 5-7 on Windows, or steps 5-6 on Macintosh. If you are using a Windows computer, you will not need to sign in to the HP Passport program again.
- **NOTE** You can configure a maximum of 32 **Share** destinations (individual e-mail addresses or group distribution lists) that can be listed in the **Share** menu on your camera.
- 9 When you have finished adding e-mail addresses or distribution lists, click on either Save to Camera on a Windows computer or Next on a Macintosh computer to add the new addresses or distribution lists to the camera Share menu. When the computer confirms that the addresses or lists were saved to your camera, disconnect the camera from the computer, and press the Share ☑/ ☑ button on the camera to view the new e-mail destinations in the Share menu.
- 10 You are now ready to select images on the camera to be e-mailed. See the next section for how to do this.

Selecting images to be e-mailed

- **1** Turn on the camera, and then press the **Share** $\overline{\mathscr{D}}/\boxtimes$ button.
- 2 Use the buttons to scroll to the image you want to e-mail.

NOTE Video clips cannot be selected for e-mail.

- 3 Use the buttons to scroll to the e-mail destination that you want to select.
- 4 Press the OK button to select the e-mail destination, and a √ appears over that e-mail destination.

NOTE You can select more than one e-mail destination or print option for an image.

- 5 Scroll to other images by using the 1 buttons, and repeat steps 3 and 4 to select e-mail destinations for each image.
- 6 When you are finished selecting all the images you want to e-mail, press the Share @/ D button to exit the Share menu.
- 7 The next time you connect the camera to your computer, the images you selected for e-mail will be sent to their respective destinations. See Chapter 5: Unloading and printing images on page 67 for information about connecting the camera to a computer.

The way images are e-mailed works differently on Windows and Macintosh computers, as explained in the following subsections.

Windows

Images are not e-mailed directly to anyone. Rather, a message is sent to each e-mail address or group distribution list that you selected in the **Share** menu. The message contains thumbnail images of the photos that you selected for that address or list, as well as a link to a web page where the recipient can view the images. From that web page, the recipient can do things like reply to you or print the image. This makes it easy for people who use different e-mail programs to be able to see your images without the difficulty of dealing with e-mail attachments

Macintosh

Images are e-mailed directly to recipients using the default e-mail program on your computer.

Chapter 5: Unloading and printing images

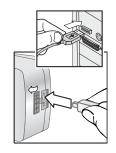
Once you have taken pictures, you can unload them from your camera to a computer or print them directly to a printer, as explained in this chapter.

NOTE You can also use the optional HP 8886 camera dock to unload images to a computer or print them directly to a printer, as well as display them on a television. See the HP 8886 Camera Dock User's Manual that was included with your camera dock.

Unloading to a computer

NOTE If you are using a Macintosh computer, you must first change the USB Configuration setting to Disk Drive in the Setup menu. See USB configuration on page 72.

- 1 Turn off the camera.
- 2 Your camera came with a special USB cable for connecting the camera to a computer. Connect the larger end of that USB cable to the computer.
- 3 Open the rubber door on the side of the camera and connect the small end of the USB cable to the USB connector on the camera.



- NOTE If your computer is running Windows XP, when you turn on the camera in the next step, a dialog box will display that requests you to Select the program to launch for this action. Simply click on Cancel to close this dialog box.
- 4 Turn on the camera. The HP Image Unload software will launch on your computer. If you have set the software to automatically unload the images in the camera, the images will automatically unload to the computer. Otherwise, in the Welcome screen, click Start Unload. If there were any images in the camera that were selected in the Share menu for printing or e-mail, those actions are started after the images have been unloaded to the computer.
- **5** When the unload screen on the computer says **Finished**, your images have been saved and shared. You can now disconnect the camera from the computer.
- NOTE To unload images to a computer that does not have the HP Photo & Imaging software installed on it, change the USB Configuration setting to Disk Drive in the Setup menu. See USB configuration on page 72. This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the hard drive of your computer.

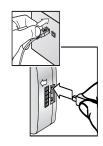
Printing images

To print images that have been unloaded to the computer, you can use the HP Photo & Imaging software that was shipped with the camera.

You can also connect the camera directly to any HP Photosmart printer or to any other HP printer with a front panel USB port, then print images selected from the camera **Share** menu or all images in the camera.

To print directly to an HP Photosmart printer or to any other HP printer with a front panel USB port:

- 1 Check that the printer is turned on and is online. (There should be no blinking lights on the printer or error messages displayed about the printer.) Load paper into the printer, if needed.
- 2 Your camera came with a special USB cable for connecting the camera directly to a printer. Connect the square end of the USB cable to the printer.
- 3 Open the rubber door on the side of the camera and connect the small end of the USB cable to the USB connector on the camera.



The Print Setup menu displays on the camera. If you already selected images to print from the camera Share menu, the number of images selected will be shown, as in this example Print Setup menu. Otherwise, Images: ALL will be displayed.



- 4 Adjust the settings in the Print Setup menu by using the buttons to highlight a menu option and the buttons to change the setting for each option.
- **NOTE** There is a print preview in the lower right-hand corner of the **Print Setup** screen showing the page layout that will be used for printing images. This print preview updates as you change the settings for the **Print Size** and **Paper Size**.
- 5 Press the OK button to begin printing.

Chapter 6: Using the setup menu

The Setup menu allows you to adjust a number of camera settings, such as the camera sounds, date and time, and the configuration of the USB or TV connection. You can access the Setup menu from either the Capture or Playback menu.

1 To display the Setup menu, open either the Capture or Playback menu and use the buttons to highlight the Setup % menu option. (For information about these other menus, see Using the capture menu on page 36, or Using the playback menu on page 51.) Then press the OK button.



- 2 Use the buttons to scroll through the Setup menu options.
- 3 Either press the OK button to select a highlighted option and display its sub-menu, or use the ◀ ▶ buttons to change the setting for the highlighted option without going to its sub-menu.
- 4 Within a sub-menu, use the buttons and the OK button to change the setting for the Setup menu option.

5 To exit the Setup menu and return to the Capture menu or Playback menu, highlight the ← EXIT SETUP menu option and press the OK button.

Camera sounds

Camera sounds are the sounds that the camera makes when you turn it on, press a button, or take a picture. Camera sounds are not the audio sounds recorded with images or video clips.

If you press OK when the Camera Sounds option is highlighted in the Setup menu, the Camera Sounds sub-menu displays. This sub-menu allows you to set the volume level of the camera sounds, or turn camera sounds off



The default Camera Sounds setting is Low.

NOTE The volume level of camera sounds is not affected by the audio level adjustment provided with the **Play** menu option in the **Playback** menu.

Date & time

If you press OK when the Date & Time option is highlighted in the Setup menu, the Date & Time screen displays. This screen allows you to set the current date and time, as well as the date/time format, for the camera. This is usually done when



you first set up the camera; however, you may need to re-set the date and time when you are travelling to different time zones, or when the batteries are removed from the camera for more than 10 minutes.

To set the date, time, and date/time format, follow the same procedure used in Setting the date and time on page 18.

USB configuration

If you press OK when the USB option is highlighted in the Setup menu, the USB Configuration sub-menu displays. This sub-menu determines how the camera is recognized when connected to a computer.



Digital Camera—Causes the
 computer to recognize the camera as a digital camera
 using the Picture Transfer Protocol (PTP) standard. This is
 the default setting on the camera. Use this setting for
 unloading and sharing on a Windows computer that has
 the HP Photo & Imaging software installed on it.

 Disk Drive—Causes the computer to recognize the camera as a disk drive using the Mass Storage Device Class (MSDC) standard. Use this setting for unloading and sharing on a Macintosh computer, or on a Windows computer that does not have the HP Photo & Imaging software installed on it.

TV configuration

If you press OK when the TV option is highlighted in the Setup menu, the TV Configuration sub-menu displays. This sub-menu allows you to set the format of the video out signal for displaying camera images on a television (TV) that is connected to



the camera with an optional HP 8886 camera dock.

- NTSC—Format used primarily in North America and Japan
- PAL—Format used primarily in Europe

The default setting depends on the language that you selected when you powered on the camera for the first time. For more information, see Choosing the language on page 18.

For more information on connecting the camera to a TV, see the HP 8886 Camera Dock User's Manual.

Language

If you press OK when the Language option is highlighted in the Setup menu, the Language sub-menu displays. This sub-menu allows you to set the language used in the camera interface, including the text in menus and on the Image Display.



The default Language setting is English.

To set the language on the camera, follow the same procedure used in **Choosing the language** on page 18.

Chapter 7: Troubleshooting and support

Problems and solutions

NOTE If you still cannot solve your problem after reviewing the troubleshooting information provided in the following table, you can run diagnostic tests on your camera to try to isolate and solve the problem yourself. The diagnostic tests for the HP Photosmart 930 series digital camera are provided on the following website: www.hp.com/support.

Problem	Possible cause	Solution
The camera does not turn on.	The batteries are functioning incorrectly, are dead, are installed incorrectly, or are missing.	The charge in the batteries can be low or completely drained. Try installing new or recharged batteries. Ensure that the batteries are inserted correctly. Do not use ordinary alkaline batteries. For best results, use photo-lithium batteries or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties.

Problem	Possible cause	Solution
The camera does not turn on. (continued) The HP AC power adapter is not connected to the camera, or is not plugged into a power outlet.	Ensure that the HP AC power adapter is connected to the camera and is plugged into a working electrical outlet.	
	The HP AC power adapter is not functioning correctly.	Ensure that the HP AC power adapter is not damaged or defective and is plugged into a working electrical outlet.
I replace the camera batteries frequently.	Extended Image Display use for Live View or video recording, excessive flash use, and excessive zooming consume a lot of battery power.	Minimize the use of Live View and video, especially if using alkaline batteries. Also use the flash and zoom only when necessary. Use an HP AC power adapter to power the camera when you are using the Image Display for an extended period of time, or use the viewfinder instead of the Image Display whenever possible. Do not use ordinary alkaline batteries. For best results, use photo-lithium batteries or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties.

Problem	Possible cause	Solution
I replace the camera batteries frequently. (continued)	The NiMH batteries you are using were recharged incorrectly, or have drained on their own because they have not been used lately.	When NiMH batteries are brand new or have not been used in several months, they should be charged and fully drained 3-4 times to reach optimum capacity. Also, NiMH batteries discharge on their own when not in use and when not installed in the camera. So if you have not used them in a week or more, they may benefit from being charged.
The camera batteries will not charge.	Rechargeable batteries are not inserted.	Install NiMH batteries. Lithium and alkaline batteries cannot be recharged.
	Batteries are already charged.	Battery charging will not start if the batteries were recently charged. Try charging them again after they have drained awhile.
	Battery voltage is too low for charging to start.	The camera will not attempt to charge batteries that may be damaged or over-discharged. Remove the batteries from the camera and charge them in an external battery charger, then try them in the camera again. If this does not work, it is likely that one or more of the batteries are bad. Purchase new NiMH batteries and try again.

Problem	Possible cause	Solution
The camera batteries will not charge. (continued)	The wrong AC power adapter is being used.	Use only the HP AC power adapter approved for use with this camera. See Purchasing camera accessories on page 103.
	The batteries are damaged or bad.	NiMH batteries degrade over time and can fail. If the camera detects a problem with the batteries, it will not start charging or will stop charging prematurely. Purchase new batteries.
The Power/ Memory light blinks as if the batteries are being recharged, but there are no batteries installed.	The camera does not recognize that there are no batteries installed.	Do nothing. The blinking is harmless and should stop after 5-30 minutes.
The wrong date and/or time is shown.	The batteries are drained or were removed from the camera for too long.	The date and time will be maintained for about 10 minutes without batteries installed. Reset the date and time by using the Date & Time option in the Setup menu. (See Date & time on page 72.)

Problem	Possible cause	Solution
The camera does not respond when I press a button.	The camera is turned off or has shut down.	Turn on the camera, or turn it off and then on again.
	The camera is connected to a computer.	Most of the camera buttons, except for the ON/OFF switch, do not respond when the camera is connected to a computer. If they respond, it is only to turn the Image Display on if it is off, or, in some cases, turn the Image Display off if it is on.
	The batteries are drained.	Replace or recharge the batteries.
	The camera has stopped operating.	Press the Reset switch to reset the camera. See Resetting the camera on page 83.
A long delay occurs between pressing the Shutter button and the camera taking a picture.	The camera needs time to lock focus and exposure.	Use Focus Lock. (See Using focus lock on page 27.)
	The camera is taking a long exposure.	Use a tripod or the flash.
	The camera is set to Red-eye Reduction On.	It will take longer to take a picture with Red-eye Reduction set to On. The shutter is delayed because of the additional flash. In turn, make sure your subjects wait for the second flash.

Problem	Possible cause	Solution
The camera does not take a picture when I press	You did not press the Shutter button hard enough.	Press the Shutter button all the way down.
the Shutter button.	The memory card is not installed.	Install the memory card.
	The memory card is full.	Unload images from the camera to your computer, then delete all images on the memory card. Or replace the card with a new one.
	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
	The flash is recharging.	Wait until the flash has recharged before taking another picture.
	The camera is set to Macro focus, but the focus is farther away than the macro (close-up) range.	Re-focus the camera so that it is within the macro (close-up) range. (See the range for Macro focus in Setting the focus range on page 30.)
	The camera is still saving the last picture you took.	Wait a few seconds for the camera to finish processing the last image before taking another picture.

Problem	Possible cause	Solution
My image is blurry.	The camera was set to Normal focus when it should have been set to Macro focus, or vice versa.	Set the camera to Macro to focus or to Normal focus, and try taking the picture again. (See Setting the focus range on page 30.)
	You moved the camera while you took the picture.	Hold the camera steady as you press the Shutter button or use a tripod.
	The light is low and the flash is set to Flash Off ①.	In dim light, the camera requires a longer exposure. Use a tripod to hold the camera steady, improve lighting conditions, or set the flash to Flash On \$\frac{1}{2}\$ (see page 33).
	The camera focused on the wrong thing, or was unable to focus.	Use Focus Lock. (See Using focus lock on page 27.)
My image is too bright.	The flash provided too much light.	Use the Flash Off ③ setting (see page 33).
	You were too close to the subject to use the flash.	Move back from the subject or use the Flash Off ③ setting (see page 33), and take the picture again.

Problem	Possible cause	Solution
My image is too bright. (continued)	A natural or artificial source other than the flash provided too much light.	Try taking the picture from a different angle. Avoid pointing the camera directly toward a bright light or reflective surface on a sunny day. Use the Flash On \$\frac{1}{2}\$ setting (see page 33) or adjust the Exposure Compensation (see page 32).
	The scene had many dark objects, such as a black dog on a black couch.	Decrease the Exposure Compensation (see page 32) so the dark objects in the scene will not look "washed-out."
My image is too dark.	There was not enough light.	Wait for natural lighting conditions to improve, add indirect lighting, use the flash (see page 33), or adjust the Exposure Compensation (see page 32).
	The flash was on, but the subject was too far away.	Make sure your subject is within the flash working distance (see Appendix B: Specifications on page 105). If so, try using the Flash Off ① setting (see page 33), which will require a longer exposure.
	A light shone behind the subject.	Use the Flash On \$\frac{1}{2}\$ setting (see page 33) to brighten the subject, or adjust the Exposure Compensation (see page 32).

Problem	Possible cause	Solution
My image is too dark. (continued)	Your finger blocked the flash.	Be sure to move your fingers away from the flash when you take a picture.
	The scene had many light- colored objects, such as a white dog in snow.	Increase the Exposure Compensation (see page 32) so the light-colored objects in the scene will not look "muddy."

Resetting the camera

If your camera does not respond when you press any buttons, use the camera Reset switch to reset the camera:

- 1 Open the battery door on the bottom of the camera and remove both batteries.
- 2 Press the straightened end of a paper clip into the Reset switch until the switch is depressed, then remove the paper clip. The camera is reset.
- 3 Reinsert the batteries and close the battery door. You may now use the camera again.



Error messages on the camera

Message	Possible cause	Solution
Batteries depleted. Camera is shutting down.	Battery power is too low to continue operation.	Replace or recharge batteries, or use an optional HP AC power adapter.
Batteries low	Battery power is low (less than 1/3).	Either recharge or replace the batteries soon.
Batteries too low for Live View	Battery power is too low to use Live View on the Image Display.	Take pictures with the viewfinder instead of the Image Display. Replace or recharge batteries, or use an optional HP AC power adapter.
Batteries are defective	One or both cells are shorted or severely overdischarged.	Purchase new batteries.
Batteries cannot be charged	Either an error occurred during charging, an AC power disruption occurred during charging, the wrong AC power adapter is being used, batteries are defective, or no batteries are installed in the camera.	Retry charging the batteries a couple of times. If that fails, purchase new batteries and try again.

Message	Possible cause	Solution
Lens is obstructed	Something is blocking the lens from extending at power up.	Clear space for the lens so it can extend.
Unsupported card	The card in the memory slot is not a memory card or is not a supported memory card.	Ensure that the memory card is the proper type for your camera. (See Appendix B: Specifications on page 105.)
No card in camera	The camera does not have a memory card installed.	Install a memory card.
Card is unformatted	The memory card needs to be formatted.	Format the memory card by using the Format Card option in the Delete sub- menu of the Playback menu. (See Delete on page 55.) This will delete all data on the card.
Card has wrong format	The memory card is formatted for a different device such as an MP3 player.	Re-format the card by using the Format Card option in the Delete submenu of the Playback menu. (See Delete on page 55.)
Unable to format	The memory card is corrupted.	Replace the memory card.

Message	Possible cause	Solution
Card is locked	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
Card is full	There is insufficient room to save more images on the memory card.	Unload images from the camera to your computer, then delete all images on the memory card (see Delete on page 55). Or replace the card with a new one.
Card is unreadable	The memory card is not a supported card or is corrupted.	Ensure that the memory card is the proper type for your camera. (See Appendix B: Specifications on page 105.) If it is the proper type, try formatting it (see the Format option in the Delete sub-menu on page 55). If it will not format, it is probably corrupted. Replace the memory card.
PROCESSING	The camera is processing data, such as saving the last picture you took.	Wait a few seconds for the camera to finish processing before taking another picture.
Charging Flash	The camera is recharging the flash.	It takes longer to charge the flash when the batteries are low. If you see this message a lot, you may need to replace or recharge the batteries.

Message	Possible cause	Solution
Focus too far	The focus distance is beyond where the camera can focus.	Make sure the camera is not set to Macro focus. Consider setting the camera to Infinity of focus if your picture subject is far in the distance.
Focus too close	The focus distance is closer than the camera can focus.	Set the camera to Macro focus, or if set to Macro focus, move further away from the subject.
Low light - unable to focus	The scene is too dark and the camera cannot focus.	Add an external light source, or use Focus Lock (see page 27) and point at a part of the scene that is brighter.
Unable to focus and blinking 🚜	The camera is set to Macro focus, but the subject for the picture is too far.	Set the camera to Normal focus, and try taking the picture again. (See Setting the focus range on page 30.)
	The subject did not provide enough contrast for the camera to focus properly.	Use Focus Lock before taking the picture (see page 27).
-my	The light is low and the image is likely to be blurry due to the long exposure required.	Use the flash (see Setting the flash on page 33), or use a tripod.

Message	Possible cause	Solution
F-number and shutter speed turn red in Live View	The camera is out of range for the selected aperture.	Select a different aperture when using the Aperture Priority Av exposure mode.
No images in camera	There are no images or video clips on the memory card and you are trying to review them in Playback.	Take some pictures or video clips.
Cannot display image	Possibly comes from copying images to the memory card from a computer, or a corrupted image caused by the camera not shutting down properly.	Use the HP software to edit the images copied on the memory card. Also, do not remove batteries or the memory card when the camera is turned on.
Unknown device	The camera is connected to a USB device that it does not recognize.	Make sure that the camera is connected to a supported printer or computer.

Message	Possible cause	Solution
Unable to communicate with printer	There is no connection between the camera and printer.	Make sure the cable is connected between the camera or the optional HP 8886 camera dock and the printer. If that does not work, turn off the camera and disconnect it. Turn the printer off and then on again. Re-connect the camera and turn it on.
	A supported printer is either turned off or not connected to the camera.	Make sure the camera is connected to a supported printer and that the printer is turned on.
Unsupported printer	The printer is an unsupported device.	Connect the camera to a supported printer, such as an HP Photosmart printer or another HP printer with a front panel USB port. Or connect the camera to a computer and print from there instead.
Photo tray is engaged	The selected paper size cannot be used with the printer photo tray.	Disengage the printer photo tray, or change the paper size.
Printer top cover is open	The printer is open.	Close the top cover of the printer.

Message	Possible cause	Solution
Incorrect or missing print cartridge	The printer cartridge is the incorrect model or is missing.	Install a new printer cartridge, turn the printer off, then turn it back on.
Printer has a paper jam or The print carriage has stalled	There is a paper jam or the printer carriage has stalled.	Turn off the printer. Clear the paper jam, and then turn on the printer.
Printer is out of paper	Your printer is out of paper.	Load paper into the printer, and then press the OK or Continue button on the printer. To cancel the print job, press the OK button on the camera.
Printing canceled	The print job has been canceled.	Press the OK button on the camera. Complete the print request again.
Any error code numbers that appear	The camera may have a hardware or firmware problem.	Turn the camera off and then on again. If that does not fix the problem, try resetting the camera (see page 83). If the problem persists, call HP Support (see page 93).

Error messages on the computer

Message	Possible cause	Solution
Connection between the imaging device and computer failed	The camera might be connected to a computer through a USB hub.	Try connecting the camera directly to the computer, or disconnect other devices attached to the USB hub.
The software cannot retrieve the Share Menu information from your camera	The computer needs to write files to the memory card during HP Instant Share setup, but the memory card is either missing, full, or locked.	Either install a memory card, make room on the memory card, or unlock it by switching the locking tab on the card to the unlocked position.
Computer cannot find the connected camera	The camera is turned off.	Turn on the camera.
	The camera is not working correctly.	Try connecting the camera directly to an HP Photosmart printer or an HP printer with a front panel USB port, and print an image. This will verify that the image, memory card, USB connection, and the USB cable are functioning correctly, or not.
	The cable is not connected correctly.	Make sure that the cable is firmly connected to the computer and camera.

Message	Possible cause	Solution
Computer cannot find the connected camera (continued)	The camera is set to the Digital Camera setting in the USB Configuration sub-menu of the Setup menu, but the computer cannot recognize the camera as a digital camera.	Change the USB Configuration setting to Disk Drive in the Setup menu. (See USB configuration on page 72.) This allows the camera to appear as another disk drive on the computer so that you can easily copy the image files from the camera to the hard drive of your computer.
	The camera is connected to the computer through a USB hub, and your USB hub is not compatible with the camera.	Connect the camera directly to a USB port on the computer.
	You are using the HP 8886 camera dock and forgot to press the Save/Print button.	Press the Save/Print button on the camera dock.
	The memory card is locked.	Switch the locking tab on the memory card to the unlocked position.
	The USB connection failed.	Reboot the computer.

Getting assistance

This section contains support information for your digital camera, including support website information, an explanation of the support process, and support phone numbers.

HP accessibility website

Customers with disabilities can get help by visiting www.hp.com/hpinfo/community/accessibility/prodserv.

HP photosmart website

Visit www.photosmart.hp.com or www.hp.com/photosmart for the following information:

- Tips on using your camera more effectively and creatively
- HP digital camera driver updates and software
- Register your product
- Subscribe to newsletters, driver and software updates, and support alerts

Support process

The HP support process works most effectively if you perform the following steps in the order specified:

- 1 Review the troubleshooting section of this User's Manual, which starts on page 75.
- 2 Access the HP Customer Care Center website for support. If you have access to the Internet, you can obtain a wide range of information about your digital camera. Visit the HP website for product help, drivers, and software updates at www.hp.com/support.

Customer Care is available in the following languages: Dutch, English, French, German, Italian, Portuguese, Spanish, Swedish, Traditional Chinese, Simplified Chinese, Japanese, Korean. (Danish, Finnish, and Norwegian support information is available in English only.)

- 3 Access HP e-support. If you have access to the Internet, connect with HP via e-mail by going to: www.hp.com/support. You will receive a personal reply from an HP Customer Care technician. E-mail support is available in the languages listed at that website.
- 4 Contact your local HP dealer. If your digital camera has a hardware failure, take it to your local HP dealer for a solution. Service is free during your digital camera's limited warranty period. After the warranty period, the dealer will quote a service charge.
- 5 Contact the HP Customer Care Center for support by phone. Please consult the following website to check the details and conditions of phone support in your country/region: www.hp.com/support. As a part of HP's continuing efforts to improve phone support information services, we advise you to check the HP website on a regular basis for new information regarding service features and delivery. If you cannot solve the problem using the above options, call HP while you are in front of your computer and digital camera. For faster service, please be prepared to provide the following information:
 - The digital camera's model number (located on the front of the camera)
 - The digital camera's serial number (located on the bottom of the camera)
 - The computer's operating system

- The version of the digital camera software (located on the camera's CD label)
- Messages displayed at the time the situation occurred

The applicable conditions for HP phone support are subject to change without notice.

Telephone support is free from the date of purchase for the period specified unless otherwise noted.

Locations	Free Phone Support Period
Africa	30 days
Asia Pacific	1 year
Canada	1 year
Europe	1 year
Latin America	1 year
Middle East	30 days
United States	1 year

Phone support in the United States

Support is available both during and after the warranty period.

Within the period of your warranty, telephone support is provided free of charge. Call (208) 323-2551. If this is a long distance call for you, long distance charges will apply.

US phone support is available in both English and Spanish 24 hours a day, 7 days a week (days and hours of support may change without notice).

After the warranty period, call (208) 323-2551. Charges are \$25.00 per issue, and are charged to your credit card. If you think your HP product needs service, call the HP Customer Care Center, which can help determine if service is required.

Phone support in Europe, the Middle East, and Africa

HP Customer Care Center phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.

Algeria +213 (0)61 56 45 43

Austria +43 (0)820 87 4417

Bahrain +973 800 728

Belgium +32 070 300 005 (Dutch) +32 070 300 004 (French)

Czech Republic +42 (0) 2 6130 7310

Denmark +45 70202845

Egypt +20 02 532 5222

Finland +358 (0)203 66 767

France +33 (0) 8 92 69 60 22 (Euro 0.34/min)

Germany +49 (0)180 5652 180 (Euro 0.12/min)

Greece +30 10 60 73 603

Hungary +36 (0) 1 382 1111

Ireland +353 (0) 1890 923902

Israel +972 (0) 9 830 4848

Italy +39 (0)848 800 871

Luxembourg 900 40 006 (French) 900 40 007 (German)

Morocco +212 224 04747

Netherlands 0900 2020 165 (Euro 0.10/minute)

Norway +47 815 62 070

Poland +48 22 865 98 00

Portugal +351(0) 808 201 492

Romania +40 1 315 44 42

Russian Federation +7 095 797 3520 (Moscow) +7 812 346 7997 (St Petersburg)

Saudi Arabia +966 800 897 14440

Slovakia +421 2 6820 8080

South Africa 086 000 1030 (RSA) +27-11 258 9301 (outside RSA)

Spain +34 902 010 059

Sweden +46 (0) 77-120 4765

Switzerland +41 0848 672 672 (German, French, Italian— Peak time 0.08 CHF/Outside peak 0.04 CHF)

Tunisia +216 1 891 222

Turkey +90 216 579 71 71

Ukraine +7 (380 44) 490-3520

United Arab Emirates +971 4 883 8454

United Kingdom +44 0870 010 4320

Other phone support worldwide

HP Customer Care Center phone numbers and policies may change. Visit the following website to check the details and conditions of phone support in your country/region: www.hp.com/support.

Argentina +54 0 810 555 5520

Australia +63 (3) 8877 8000 (or local (03) 8877 8000)

Brazil +55 (11) 3747 7799 (Grande São Paulo) +55 0800 157751 (outside Grande São Paulo)

Canada +1 905 206 4663 (during the warranty period) +1 877 621 4722 (after the warranty period)

Central America and the Caribbean +1 800 711 2884

Chile +56 800 22 5547 (Post-sales Business Computing +56 800 360 999 (Post-sales Home Computing)

China +86 (10) 6564 5959

Colombia +57 9 800 114 726

Guatemala +502 1 800 999 5105

Hong Kong SAR +852 3002 8555

India 1 600 112267 or +91 11 682 6035 (Hindi & English)

Indonesia +62 (21) 350 3408

Japan 0570 000 511 (inside Japan) +81 3 3335 9800 (outside Japan)

Korea, Republic of +82 (2) 3270 0700 (Seoul) 0 80-999-0700 (outside Seoul)

Malaysia +60 1 800 805 405

Mexico +52 58 9922 (Mexico City) +52 01 800 472 6684 (outside Mexico City)

New Zealand +64 (9) 356 6640

Peru +51 0 800 10111

Philippines +63 (2) 867 3551

Puerto Rico +1 877 2320 589

Singapore +65 6272 5300

Taiwan +886 0 800 010055

Thailand +66 (2) 661 4000

United States +1 (208) 323-2551

Venezuela +58 0 800 4746 8368

Vietnam +84 (0) 8 823 4530

Appendix A: Batteries and camera accessories

Managing batteries

When the batteries are removed from the camera, the date and time settings are preserved for about 10 minutes. If the camera is without batteries for longer than 10 minutes, the clock is set to the last date and time at which the camera was used. You may be prompted to update the date and time.

The following battery levels may be displayed on the status screen, in Live View, in Playback, and when the camera is connected to a computer or printer.

lcon	Description
	Batteries have 65-100 percent battery life remaining.
	Batteries have 35-65 percent battery life remaining.
	Batteries have 10-35 percent battery life remaining.
•	Batteries have less than 10 percent battery life remaining. Camera will power down soon. Live View is disabled.
Blinking	Batteries are depleted. Camera will proceed to power down.

lcon	Description
⇒ >	Camera is operating on AC power (with full or non-rechargeable batteries).
	Camera is operating on AC power and is charging the batteries.

The camera uses two AA batteries. Do not use ordinary alkaline batteries. For best results, use photo-lithium or rechargeable NiMH batteries. If you must use alkaline batteries, use high-grade "ultra" or "premium" varieties.

NOTE If you do not intend to use your camera for extended periods of time (more than a month), we strongly recommend that you remove the batteries.

Extending battery life

- Minimize the use of Live View and video, especially when using alkaline batteries.
- Use the viewfinder to frame pictures instead of the Image Display. Leave the Image Display off whenever possible.
- Use zoom only when necessary.
- Use the Auto flash setting rather than Flash On.
- Minimize power cycling. If you expect to average more than one picture every five minutes, leave the camera on rather than turning it off after each shot. This minimizes the number of times the lens has to extend and retract.
- Use an optional HP AC power adapter or HP 8886 camera dock when the camera will be on for extended periods of time, or when unloading pictures to your computer or printing.

Rechargeable batteries

Nickel Metal Hydride (NiMH) batteries can be recharged by using a battery charger. NiMH batteries can also be recharged in the camera when the camera is connected to an optional HP AC power adapter or HP 8886 camera dock. Batteries are fully recharged via the HP AC power adapter or camera dock in 15 hours.

Some things to keep in mind when using NiMH batteries are:

- Always recharge both NiMH batteries at the same time.
 One low-charged battery will reduce the battery life for both batteries in the camera.
- For NiMH batteries to reach optimal capacity and performance, they should first be discharged completely and recharged four separate times.
- NiMH batteries discharge when not in use, whether they are installed in a device (such as in the camera) or not. If they have not been used for more than two weeks, recharge them before using them again.

Power conservation

To conserve battery power, the Image Display turns off automatically if there is no button activity for 60 seconds. If no buttons are pressed for 6 minutes, the camera turns off (unless it is connected to a computer or printer).

Purchasing camera accessories

You can purchase additional accessories for your camera from your local retailer or online at www.hpshopping.com. Some accessories for the HP Photosmart 930 series digital camera are listed below:

- HP Photosmart 8886 camera dock:
 - United States and Canada—C8886A #A2L
 - Mexico, Brazil, Chile, Argentina, and Uruguay— C8886A #ABM
 - Korea, Australia, and New Zealand—C8886A #UUF
 - Europe (except for the United Kingdom, see the next option below)—C8886A #AC2
 - United Kingdom and South Africa—C8886A #ABU
- Memory card—Secure Digital (SD) or MultiMediaCardTM (MMC) (512 MB is the maximum usable card size)

This product only supports the use of MultiMediaCard memory cards that have been verified compliant to the MultiMediaCard specification as of January 2000. Compliant MultiMediaCard memory cards have the MultiMediaCard logo on the card.

SD memory cards sold online at www.hpshopping.com include:

- 32 MB SD card—C8895A
- 64 MB SD card—C8896A
- 128 MB SD card—C8897A

- HP AC power adapter (HP supports only HP AC power adapters and other accessories expressly approved by HP):
 - United States and Canada—C8912 #A2L
 - Korea, Australia, and New Zealand—C8912 #UUF
 - Europe—C8912 #UUS
- HP Digital Camera Accessory Kit—Y1789B #UUS for Europe (continent), Y1789B #ABU for the United Kingdom, Y1789B #A2L for North America. Contents include:
 - Universal camera case
 - Battery recharger
 - 4 rechargeable NiMH batteries
- HP Digital Camera Accessory Kit—C8884B #UUS for Europe (continent), C8884B #ABU for the United Kingdom, C8889A for North America. Contents include:
 - Universal camera case
 - Battery recharger
 - 4 rechargeable NiMH batteries
 - DC car adapter for battery recharger
 - 32 MB Secure Digital (SD) memory card

Appendix B: Specifications

Feature	Description
Resolution	Still pictures: • 5.26 MP (2668 by 1970) total pixel count • 5.08 MP (2608 by 1952) effective pixel count
	Video clips: 288 by 208 total pixel count
Sensor	Diagonal 9.04 mm (1/1.8-inch, 4:3 format)
Color depth	36-bit (12 bits by 3 colors)
Storage	Slot for memory card; Secure Digital (SD) and MultiMediaCard (MMC) memory card supported. (One 32 MB SD memory card included.) See Memory card capacity on page 110.
Lens	Focal length: • Wide—7.6 mm • Telephoto—22.8 mm F-Number: • Wide—f/2.6 • Telephoto—f/4.8
Viewfinder	Zooming optical viewfinder
Zoom	3x optical, 7x digital zoom.
	Wide—37 mmTelephoto—111 mm

Feature	Description	
Focus	TTL auto focus.	
	Focus range settings:	
	Normal (default)—Auto focus range of	
	0.5 m (19.7 in) to infinity.	
	 Macro—Auto focus range of 0.14 to 0.7 m (5.5 to 27.6 in) at wide, 0.4 to 0.7 m 	
	(15.7 to 27.6 in) at zoom ranges greater	
	than wide.	
	 Infinity—Focus is fixed at infinity. 	
Shutter speed	1/2000 to 15 seconds	
Tripod mount	Yes	
Built-in flash	Built-in flash assembly, 5 second recharge.	
Flash working	Zoom	
distance	Position ISO 100 ISO 200 ISO 400 Wide 2.5 m 3.5 m 5.1 m	
	Telephoto 1.3 m 1.9 m 2.5 m	
External flash	No	
Flash settings	Auto (default), Flash On, Flash Off, Night.	
3 -	Red-eye reduction can be added	
	independently to any of these settings through	
	the Capture menu (default is Red-eye Reduction Off).	
Image Display	•	
Image Display	1.5-inch color LED backlit, polysilicon TFT LCD with 521 by 218 dots (113,578 dots)	
Status LCD	No	

Feature	Description	
Image capture options	 Still (default) Self-Timer—Can be set to On or On - 2 shots through the Capture menu; 10 second delay for both settings. On - 2 shots setting takes a second shot about 3 seconds later. Video—15 frames per second; includes audio. Up to 2 minutes of video can be recorded. 	
Audio capture	 Still pictures—Maximum of 60 seconds of audio can be captured with each still picture. Video—Audio is captured automatically with video. 	
Exposure Mode settings	Auto (default), Action, Landscape, Portrait, Aperture Priority	
Exposure Compensation	Can be set manually from -3.0 to +3.0 EV (Exposure Value) in 0.5 EV increments.	
White Balance settings	Auto (default), Sun, Shade, Tungsten, Fluorescent, Manual	
AE Metering settings	Average, Center-Weighted (default), Spot	
ISO Speed settings	Auto (default), 100, 200, 400	
Color settings	Full Color (default), Black & White, Sepia	
Resolution settings	 5 MP - 2608 x 1952 (default) 1MP - 1296 x 976 	
Compression settings	*** - Best ** - Better (default) * - Good	

Feature	Description			
Saturation settings	Low, Medium (default), High			
Sharpness settings	Low, Medium (default), High			
Contrast settings	Low, Medium (default), High			
Playback zoom	Yes, 4.5x			
Compression format	JPEG (EXIF) for still imagesMPEG1 for video clips			
Interfaces	 USB to a computer, or USB to an HP Photosmart printer or to any other HP printer with a front panel USB port DC IN 3.3 to 3.7V HP Photosmart 8886 camera dock 			
Standards	 PTP transfer (15740) MSDC transfer NTSC/PAL JPEG MPEG1 DPOF 1.1 EXIF 2.2 DCF 1.0 			

Feature	Description
Power	2 AA batteries (2 non-rechargeable AA batteries included) or optional HP AC power adapter. Acceptable batteries include photolithium, "ultra" or "premium" grade alkaline, or rechargeable NiMH. NiMH batteries can be recharged in the camera using the optional HP AC power adapter or HP camera dock.
	Optional HP AC power adapter (Input: 100 to 240Vac; Output: 3.3 to 3.7Vdc @ 571 to 2500mA):
	 United States and Canada—C8912 #A2L Korea, Australia, and New Zealand—C8912 #UUF Europe—C8912 #UUS
	 Optional HP Photosmart 8886 camera dock: United States and Canada—C8886A #A2L Mexico, Brazil, Chile, Argentina, and Uruguay—C8886A #ABM Korea, Australia, and New Zealand—
	C8886A #UUF • Europe (except for the United Kingdom, see the next option below)—C8886A #AC2 • United Kingdom and South Africa—C8886A #ABU
	Slow trickle recharging in camera with the optional HP AC power adapter or HP camera dock (100% in 15 hours). Automatic advanced power management. Camera has a maximum AC power consumption of 3 Volts dc (2700 mA).

Feature	Description	
External body dimensions	97 mm (L) by 45 mm (W) by 67 mm (H) 3.8 in (L) by 1.8 in (W) by 2.6 in (H)	
Weight	225 grams (7.9 ounces) without batteries	
Temperature range	Operational: 5 to 45° C (41 to 113° F) at 15 to 85% Relative Humidity	
	Storage: -30 to 65° C (-22 to 149° F) at 15 to 90% Relative Humidity	
Warranty	HP 1 year exchange warranty	

Memory card capacity

The following table lists the approximate number of still images that can be stored on a 32 MB Secure Digital (SD) memory card when the camera is set to the different Resolution and Compression settings available in the Capture menu (see page 44).

NOTE The actual file sizes and number of still images that can be stored on the memory card will vary, depending on the content of each still image.

	5MP - 2608 x 1952 Resolution	1 MP - 1296 x 976 Resolution	
*** - Best	11 images	23 images	
Compression	(2.6 MB each)	(1.25 MB each)	
** - Better	23 images	48 images	
Compression	(1.25 MB each)	(600 KB each)	
* - Good	48 images	96 images	
Compression	(600 KB each)	(300 KB each)	

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